16 December 2024

Agreement

Concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations*

(Revision 3, including the amendments which entered into force on 14 September 2017)

Addendum 147 – UN Regulation No. 148

Revision 1 - Amendment 2

Supplement 2 to the 01 series of amendments – Date of entry into force: 22 September 2024

Uniform provisions concerning the approval of light-signalling devices (lamps) for power-driven vehicles and their trailers

This document is meant purely as documentation tool. The authentic and legal binding text is: ECE/TRANS/WP.29/2024/23.

UNITED NATIONS

* Former titles of the Agreement:
Agreement concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, done at Geneva on 20 March 1958 (original version);
Agreement concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions, done at Geneva on 5 October 1995 (Revision 2).

Paragraph 3.3.1.2., renumber to 3.3.1.1.1.

Paragraph 3.3.1.3., renumber to 3.3.1.2.

Paragraph 3.3.4.4., amend to read:

"3.3.4.4. Lamps shall bear marking of the rated voltage(s) (i.e. 6V, 12V or 24V) or the range of voltage, in the case of lamps with:

(a) An electronic light source control gear; and/or

(b) A variable luminous intensity control; and/or

(c) A secondary operating mode; and/or

(d) Non-replaceable light sources."

Table 8, amend to read:

"Table 8
Luminous intensities for direction indicator lamps

Direction indicator of categories	*Minimum luminous intensity in cd (Par. 4.8.3.1. (a))*	*Maximum luminous intensity in cd when used as (Par. 4.8.3.1. (b))*		*Standard light distribution (Par. 4.8.3.1. (c))*	*Angles of geometric visibility (Par. 4.8.3.1. (d))*	
		A single lamp	*A lamp marked "D" (Par. 3.3.2.5.2.)*		*Definition*	*Minimum luminous intensity in cd*
1	$1.75 \cdot 10^2$	$1.20 \cdot 10^3$	$6.00 \cdot 10^2$	Figure A3-I	Table A2-1	$3 \cdot 10^{-1}$
1a	$2.50 \cdot 10^2$	$1.20 \cdot 10^3$	$6.00 \cdot 10^2$	Figure A3-I	Table A2-1	$3 \cdot 10^{-1}$
1b	$4.00 \cdot 10^2$	$1.20 \cdot 10^3$	$6.00 \cdot 10^2$	Figure A3-I	Table A2-1	$7 \cdot 10^{-1}$
2a (steady)	$5.0 \cdot 10^1$	$5.00 \cdot 10^2$	$2.50 \cdot 10^2$	Figure A3-I	Table A2-1	$3 \cdot 10^{-1}$
2b (variable)	$5.0 \cdot 10^1$	$1.00 \cdot 10^3$	$5.00 \cdot 10^2$	Figure A3-I	Table A2-1	$3 \cdot 10^{-1}$ (day) $7 \cdot 10^{-2}$ (night)
5	$6 \cdot 10^{-1}$	$2.80 \cdot 10^2$	$1.40 \cdot 10^2$	Table A2-2	Table A2-2	$6 \cdot 10^{-1}$
6	$5.0 \cdot 10^1$	$2.80 \cdot 10^2$	$1.40 \cdot 10^2$	Figure A3-IV	N.A.	N.A.
11	$9.0 \cdot 10^1$	$1.20 \cdot 10^3$	$6.00 \cdot 10^2$	Figure A3-I	Table A2-1	$3 \cdot 10^{-1}$
11a	$1.75 \cdot 10^2$	$1.20 \cdot 10^3$	$6.00 \cdot 10^2$	Figure A3-I	Table A2-1	$3 \cdot 10^{-1}$
11b	$2.50 \cdot 10^2$	$1.20 \cdot 10^3$	$6.00 \cdot 10^2$	Figure A3-I	Table A2-1	$3 \cdot 10^{-1}$
11c	$4.00 \cdot 10^2$	$1.20 \cdot 10^3$	$6.00 \cdot 10^2$	Figure A3-I	Table A2-1	$3 \cdot 10^{-1}$
12	$5.0 \cdot 10^1$	$5.00 \cdot 10^2$	$2.50 \cdot 10^2$	Figure A3-I	Table A2-1	$3 \cdot 10^{-1}$

"

Paragraph 5.7.7., amend to read:

"5.7.7. Colour:

The colour of the light emitted shall be amber. However, it can be red, if the rearmost side marker lamp is grouped or combined or reciprocally incorporated with the rear position lamp, the rear end-outline marker lamp, the rear fog lamp, the stop lamp, or is grouped with or has part of the light emitting surface in common with the rear retro-reflector."

Annex 8, paragraph 1.2.2., amend to read:

"1.2.2. For all other lamps, the luminous intensities measured after 1 min and either

- after 30 minutes of operation, or

- after photometric stability has occurred

shall comply with the minimum and maximum requirements.

Operation of direction indicator lamps shall be done in flashing mode (f = 1.5 Hz, duty factor 50 per cent).

The luminous intensity distribution after 1 min of operation may be calculated from the luminous intensity distribution either after 30 min of operation or after photometric stabilization, by applying at each test point the ratio of luminous

intensities measured at HV after 1 min and either after 30 min of operation or after photometric stabilization."